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EXAMINER

MAIS, MARK A

ART UNIT

PAPER NUMBER

2419

NOTIFICATION DATE

DELIVERY MODE

02/02/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/779,336	Applicant(s) HIGUCHI ET AL.	
	Examiner MARK A. MAIS	Art Unit 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 22, 2008 has been entered.

Drawings

2. Figure 22 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: As noted above, Figure 22 should be designated as --Prior Art-- and the description should have a corresponding entry. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8, 9, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claims 8, 9, and 11 recite the limitation "wherein each of a plurality of nodes retains respective management information". There is insufficient antecedent basis for this limitation in the claim. For example, which "nodes" are being referred to? All of the nodes in the system? All of the hierarchically disposed nodes? A specific one of the hierarchically disposed nodes (e.g., the last node on the subordinate side)? Correction is required.

6. Claims 1, 8, 9, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. Specifically, the term "related" node in claims 1, 8, 9, and 11 is a relative term which renders the claim indefinite. The term "related" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example, as claimed, any one of the terminal nodes or any one of the hierarchically disposed terms could be "related" to the mobile station based on technology (CDMA/TDMA), architecture (GSM/GPRS/UMTS), range (based on distance or power), performance metrics (C/I ratios; S/N ratios), etc. Correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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8. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Willars et al. (USP 7,072,329).

9. With regard to claims 1 and 6, Willars et al. discloses a mobile communication system performing both radio communication to a mobile station and packet communication within the system, said mobile communication system comprising:

a top node [**Fig. 2B, GGSN 20**] located at a boundary between a mobile communication network [**Fig. 2B, UTRAN 24**] and a fixed network of an IP network system [**Fig. 2B, Internet 14**];

a plurality of terminal nodes [**Fig. 2B, interpreted as the combination of BS28₁₋₁ and Interworking unit 50B (BS28₁₋₁/Interworking unit 50B), BS28₁₋₂, BS28₂₋₁, BS28₂₋₂ (base station—claim 6)**] respectively to accommodate mobile stations thereunder [**e.g., Fig. 2B, UE 30**];

a plurality of intermediate nodes [**Fig. 2B, RNC 26₁, RNC 26₂**] layered in a tree shaped connection structure and provided between the top node and the terminal nodes, the tree-shaped connection structure having a network structure in which there is no redundant routes *for IP packet flow* to each terminal node [**Fig. 2B, there are no redundant data/voice/IP packet flow communication routes to each of BS28₁₋₁/Interworking unit 50B, BS28₁₋₂, BS28₂₋₁, or BS28₂₋₂ from GGSN 20 (i.e., there are only control signaling interfaces; col. 9, lines 31-45; col. 9, line 66 to col. 10, line 9; See also col. 8, lines 44-46)**],

wherein each of the plurality of terminal nodes retains respective management information of a mobile station *so that the management information of the mobile station is kept*

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by only one related terminal node **[it is inherent that base stations retain management information of the mobile stations registered and communicating in their respective zones (thus, once the mobile station registers at one base station, the management information only needs to be kept at that base station); additionally, Interworking Node 50 has an internal database 52 which contains the IP addresses of UEs, col. 11, lines 37-40].**

10. With regard to claim 3, Willars et al. discloses that a parameter requesting to use a common traffic channel is contained in a connection request signal transmitted from the mobile station to the *terminal* node **[Fig. 2B, between UE 30 and BS28₁₋₁/Interworking Node 50B; it is inherent to UMTS that signaling occurs for the UE to request access to a common channel; for example, using the RACH (col. 9, lines 6-10); the connection request parameter can be any part of the connection request: the packet, the header, the payload, a flag, etc.],** and by use of the parameter, the terminal node secures a transmission path for transferring the user data on the common traffic channel provided between the mobile station and the terminal node **[the UE can transmit/receive data using common traffic channels, col. 9, lines 13-16].**

11. With regard to claim 4, Willars et al. discloses that an IP address assigned to the mobile station is further contained in the connection request signal and the terminal node generates a management table having the IP address correspondingly to a number for identifying the mobile station, and the mobile station is managed on an IP address basis according to the management table **[UMTS supports both IPv4 and IPv6 on the user plane; it is inherent that base stations retain management information of the mobile stations registered and**

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communicating in their respective zones and thus, BS28₁₋₁/Interworking Node 50B would have a table of all assigned IP addresses which correspond to UEs IDs in the area it serves; for example, BS28₁₋₁/Interworking Node 50B (w/internal database 52) can translate the UEs' E.164 identification to the correct IP address (col. 12, lines 13)].

12. With regard to claim 5, Willars et al. discloses that the terminal node comprises at least a function of managing the terminal location, a function of managing a communication path, and environment setting information necessary for establishing packet communication between the mobile station and the terminal node **[Fig. 2B, between UE 30 and BS28₁₋₁/Interworking Node 50B (w/internal database 52); it is inherent to UMTS that signaling occurs for the UE to request access to a common channel; for example, using the RACH (col. 9, lines 6-10)]** and a message transmitted from the mobile station for generating the environment setting information is terminated in the terminal node **[it is inherent to UMTS that signaling occurs for the UE to request access to a common channel; for example, using the RACH (col. 9, lines 6-10); base stations inherently manage communications to and from a subscriber UE].**

13. With regard to claim 7, Willars et al. discloses that a first processing procedure registering the location of the mobile station into the terminal node by setting up a signal transmission path between the terminal node and the mobile station **[it is inherent to UMTS that signaling occurs for the UE to request access to a common channel; for example, using the RACH (col. 9, lines 6-10); base stations inherently manage communications to and from a subscriber UE];**

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a second processing procedure setting a mobile communication environment [**the radio connection to the base station, col. 2, lines 31-34**]; and

a third processing procedure setting up a user data transmission path [**Fig. 2B, communications to/from Internet 14--GGSN 20—RNC26₁—BS28₁₋₁/Interworking Node 50B (w/internal database 52)--UE 30 via broadcast channels col. 9, lines 1-6**].

Claim Rejections - 35 USC § 102/103

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2, and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Willars et al. (USP 7,072,329).

17. With regard to claim 2, Willars et al. discloses that each plurality of intermediate nodes transfers user data either received from a node located in the network concerned [e.g., **RNC 26₁ transmits data to BS28₁₋₁ /Interworking unit 50B**], or received from a different network and addressed to the network [e.g., **RNC 26₁ transmits data to BS28₁₋₁ /Interworking unit 50B**], by use of a broadcast format to the terminal nodes [**a broadcast format is inherent in wireless communication—especially regarding radio network controllers executing a soft handoff for UE 30 moving from the zone for BS28₁₋₁ /Interworking unit 50B to the zone for BS28₁₋₂; during a soft handoff, the radio network controller “broadcasts” the data to both base stations (as control is passed from one base station to the other) so that the same information is sent to UE 30; Alternatively, it is well known to use broadcast communications to transfer data. Thus, using a broadcast format to transfer data would have been obvious to one of ordinary skill in the art at the time of the invention in order to reduce complexity as well as ensure that all subordinate base stations receive the same information that is sent to UE 30**], in which the user data is further transmitted to a mobile station subordinate to and managed by the terminal node, based on the management information [Fig. 2B, communications to/from Internet 14--GGSN 20—RNC26₁—BS28₁₋₁ /Interworking Node 50B—UE 30 (via broadcast channels col. 9, lines 1-6)].

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18. With regard to claim 8, Willars et al. discloses a mobile communication system transmitting information either addressed to or originated from a mobile station [Fig. 2B, UE 30] on a packet communication basis between hierarchically disposed nodes,

wherein the hierarchically disposed nodes are layered in a tree-shape connection structure having a network structure in which there are no redundant routes *for IP packets* to each terminal node [Fig. 2B, **there are no redundant data/voice/IP packet communication routes to each of BS28₁₋₁/Interworking unit 50B, BS28₁₋₂, BS28₂₋₁, or BS28₂₋₂ from GGSN 20 (i.e., there are only control signaling interfaces; col. 9, lines 31-45; col. 9, line 66 to col. 10, line 9; See also col. 8, lines 44-46)],**

wherein a node disposed on the superordinate side [Fig. 2B, RNC 26₁] in the hierarchy comprises a means for transmitting a packet in a broadcast format [**a broadcast format is inherent in wireless communication—especially regarding radio network controllers executing a soft handoff for UE 30 moving from the zone for BS28₁₋₁/Interworking unit 50B to the zone for BS28₁₋₂; during a soft handoff, the radio network controller “broadcasts” the data to both base stations (as control is passed from one base station to the other) so that the same information is sent to UE 30; Alternatively, it is well known to use broadcast communications to transfer data. Thus, using a broadcast format to transfer data would have been obvious to one of ordinary skill in the art at the time of the invention in order to reduce complexity as well as ensure that all subordinate base stations receive the same information that is sent to UE 30]** to nodes disposed on a subordinate side [Fig. 2B, UEs 30], and

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a node disposed on the subordinate side in the hierarchy [**Fig. 2B, interpreted as the combination of BS28₁₋₁/Interworking unit 50B**] comprises a means for transmitting [**Fig. 2B, it is inherent that BS28₁₋₁/Interworking unit 50B has transmission/reception means**] a packet to a predetermined node superordinate to the node of interest [**Fig. 2B, interpreted as GGSN 20**], according to information received from the mobile station [**Fig. 2B, communications to/from Internet 14--GGSN 20—RNC26₁—BS28₁₋₁/Interworking Node 50B (w/internal database 52)--UE 30 via broadcast channels col. 9, lines 1-6**],

wherein each of a plurality of nodes retains respective management information of a mobile station so that the management information of the mobile station is kept by only one related node [**it is inherent that base stations retain management information of the mobile stations registered and communicating in their respective zones (thus, once the mobile station registers at one base station, the management information only needs to be kept at that base station); additionally, Interworking Node 50 has an internal database 52 which contains the IP addresses of UEs, col. 11, lines 37-40**].

19. With regard to claim 9, Willars et al. discloses that a node included in a mobile communication system transmitting information either addressed to or originated from a mobile station [**Fig. 2B, UE 30**] on a packet communication basis between hierarchically disposed nodes,

wherein the hierarchically disposed nodes are layered in a tree-shape connection structure having a network structure in which there are no redundant routes *for IP packets* to each terminal node [**Fig. 2B, there are no redundant data/voice/IP packet communication routes to each**

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of BS28₁₋₁/Interworking unit 50B, BS28₁₋₂, BS28₂₋₁, or BS28₂₋₂ from GGSN 20 (i.e., there are only control signaling interfaces; col. 9, lines 31-45; col. 9, line 66 to col. 10, line 9; *See also* col. 8, lines 44-46)], and

each node [Fig. 2B, RNC 26₁] comprises:

a transmission unit to transmit [Fig. 2B, RNC26₁; it is inherent to UMTS that RNC26₁ has multiple transmission/reception means] a packet in a broadcast format to nodes disposed on subordinate side [Fig. 2B, BS28₁₋₁/Interworking Node 50B (w/internal database 52)] in the hierarchy nodes [a broadcast format is inherent in wireless communication—especially regarding radio network controllers executing a soft handoff for UE 30 moving from the zone for BS28₁₋₁/Interworking unit 50B to the zone for BS28₁₋₂; during a soft handoff, the radio network controller “broadcasts” the data to both base stations (as control is passed from one base station to the other) so that the same information is sent to UE 30; Alternatively, it is well known to use broadcast communications to transfer data. Thus, using a broadcast format to transfer data would have been obvious to one of ordinary skill in the art at the time of the invention in order to reduce complexity as well as ensure that all subordinate base stations receive the same information that is sent to UE 30]; and

a reception unit to receive a packet transmitted from a predetermined subordinate node [Fig. 2B, RNC26₁; it is inherent to UMTS that RNC26₁ has multiple transmission/reception means],

wherein each of a plurality of nodes retains respective management information of a mobile station so that the management information of the mobile station is kept by only one related node [it is inherent that base stations retain management information of the mobile

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stations registered and communicating in their respective zones (thus, once the mobile station registers at one base station, the management information only needs to be kept at that base station); additionally, Interworking Node 50 has an internal database 52 which contains the IP addresses of UEs, col. 11, lines 37-40].

20. With regard to claim 10, Willars et al. discloses that the transmission unit [Fig. 2B, RNC26₁; it is inherent to UMTS that RNC26₁ has multiple transmission/reception means] broadcasts a packet not addressed to a different system [a broadcast format is inherent in wireless communication—especially regarding radio network controllers executing a soft handoff for UE 30 moving from the zone for BS28₁₋₁/Interworking unit 50B to the zone for BS28₁₋₂; during a soft handoff, the radio network controller “broadcasts” the data to both base stations (as control is passed from one base station to the other) so that the same information is sent to UE 30; Alternatively, it is well known to use broadcast communications to transfer data. Thus, using a broadcast format to transfer data would have been obvious to one of ordinary skill in the art at the time of the invention in order to reduce complexity as well as ensure that all subordinate base stations receive the same information that is sent to UE 30], and

when a received packet is addressed to the different system, the transmission unit transmits said packet either to the different system, or to a corresponding further superordinate node in the hierarchy [Fig. 2B, communications to/from Internet 14--GGSN 20—RNC26₁—BS28₁₋₁/Interworking Node 50B (w/internal database 52)--UE 30 via broadcast channels col. 9, lines 1-6].

21. With regard to claim 11, Willars et al. discloses a node **[Fig. 2B, interpreted as the combination of BS28₁₋₁/Interworking unit 50B]** included in a mobile communication system transmitting information either addressed to or originated from a mobile station **[Fig. 2B, UE 30]** on a packet communication basis between hierarchically disposed nodes,

wherein the hierarchically disposed nodes are layered in a tree-shape connection structure having a network structure in which there are no redundant routes *for IP packets* to each terminal node **[Fig. 2B, there are no redundant data/voice/IP packet communication routes to each of BS28₁₋₁/Interworking unit 50B, BS28₁₋₂, BS28₂₋₁, or BS28₂₋₂ from GGSN 20 (i.e., there are only control signaling interfaces; col. 9, lines 31-45; col. 9, line 66 to col. 10, line 9; See also col. 8, lines 44-46)]** comprises:

a first unit to transmit a packet to a predetermined superordinate node **[Fig. 2B, GGSN 20]** according to information received from the mobile station **[Fig. 2B, it is inherent to UMTS that BS28₁₋₁/Interworking Node 50B (w/internal database 52) has multiple transmission/reception means; this is interpreted as a transmission to GGSN 20];**

a second unit to manage location information of the mobile station **[Interworking Node 50 has an internal database 52 which contains the IP addresses of UEs, col. 11, lines 37-40];**
and

a third unit to transmit a received packet **[Fig. 2B, , it is inherent to UMTS that BS28₁₋₁/Interworking Node 50B (w/internal database 52) has multiple transmission/reception means; this is interpreted as a transmission received from RNC 26₁] having been transmitted in a broadcast format [a broadcast format is inherent in wireless communication—especially**

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regarding radio network controllers executing a soft handoff for UE 30 moving from the zone for BS28₁₋₁/Interworking unit 50B to the zone for BS28₁₋₂; during a soft handoff, the radio network controller “broadcasts” the data to both base stations (as control is passed from one base station to the other) so that the same information is sent to UE 30;

Alternatively, it is well known to use broadcast communications to transfer data. Thus, using a broadcast format to transfer data would have been obvious to one of ordinary skill in the art at the time of the invention in order to reduce complexity as well as ensure that all subordinate base stations receive the same information that is sent to UE 30] from the superordinate node in the hierarchy [Fig. 2B, RNC 26₁], to either a mobile station [Fig. 2B, UE 30] or a subordinate node further, when the packet is addressed to the mobile station of which location information is managed by the second unit [Interworking Node 50 has an internal database 52 which contains the IP addresses of UEs, col. 11, lines 37-40],

wherein each of a plurality of nodes retains respective management information of a mobile station so that the management information of the mobile station is kept by only one related node **[it is inherent that base stations retain management information of the mobile stations registered and communicating in their respective zones (thus, once the mobile station registers at one base station, the management information only needs to be kept at that base station); additionally, Interworking Node 50 has an internal database 52 which contains the IP addresses of UEs, col. 11, lines 37-40].**

Response to Arguments

22. Applicant's arguments filed on December 22, 2008 have been fully considered but they are not persuasive.

23. With respect to claims 1, 8, 9, and 11, Applicants state that Willars et al. shows a redundant route through link 29 and the interworking node/function which includes user data flow [See **Applicants' Amendment dated December 22, 2008, page 6, paragraphs 5-6; page 7, paragraphs 2-8**]. Specifically, Applicants point to 3GPP document 25.420 and argue, apparently, that the data flow explained in section 4.4 discloses IP packet flows [See **Applicants' Amendment dated December 22, 2008, page 6, paragraph 6**]. The examiner respectfully disagrees.

24. First, as noted in the rejection of claim 1 above, Willars et al. discloses that there are no redundant data/voice/IP packet flow communication routes to each of BS28₁₋₁/Interworking unit 50B, BS28₁₋₂, BS28₂₋₁, or BS28₂₋₂ (terminal nodes) from GGSN 20 [Fig. 2B; (i.e., there are **only control signaling interfaces; col. 9, lines 31-45; col. 9, line 66 to col. 10, line 9; See also col. 8, lines 44-46**)]. The examiner notes the broad, yet reasonable interpretation of redundant paths with respect to Applicants' Specification.

25. Second, the document cited specifically notes that the Iur interface handles control signaling such as handover, radio resource handling, and synchronization. Moreover the Iur data streams

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carry user [identification] data and control information for the Dedicated Channel (DCH). The Iur data streams also provide control information for handoff between the Source RNC (SRNC) and the Drift RNC (DRNC) as well as carry transport frames and MAC SDUs for the Data Shared Channel (DSCH) [3rd Generation Partnership Project (3GPP), Technical Specification (TS) Group Radio Access Network; UTRAN Iur Interface General Aspects and Principles 3GPP TS 25.420, Version 3.3.0; 2001, pages 8-9, Section 4.4]. There are no redundant routes for IP packet flow (i.e., between the core network and the mobile station). Moreover, the claim limitation of non-redundant IP packet flows to each base station still allows for the use of non-IP data or voice packets (e.g., control signaling).

26. Third, Interworking node 50 provides interworking at only the transport layer for the control signaling interfaces [col. 9, line 66 to col. 10, line 9]. The examiner notes that an interworking function provides ATM-to-IP “translation” and vice-versa (when required). Thus, the examiner does not see how such a configuration can be interpreted as a redundant path.

27. Fourth, if Applicants are arguing that lack of redundant paths means that there are absolutely no connections (wired or wireless) between radio network controllers (RNCs) such that RNC-to-RNC communications are prevented/absent, such a limitation is not present in the claims.

28. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., lack of redundant paths means that there are absolutely no connections (wired or wireless) between radio

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network controllers (RNCs) such that RNC-to-RNC communications are prevented/absent) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

29. Applicants state that Willars et al. fails to disclose the retaining management information at the respective base station [**See Applicants' Amendment dated December 22, 2008, page 6, paragraph 4**]. The examiner respectfully disagrees.

30. First, as noted in the rejection of claim 1 above, it is inherent that base stations retain management information of the mobile stations registered and communicating in their respective zones (thus, once the mobile station registers at one base station, the management information only needs to be kept at that base station); additionally, Interworking Node 50 has an internal database 52 which contains the IP addresses of UEs, [**col. 11, lines 37-40**]. Moreover, if the mobile station registers with only one base station and never moves out of that base station's coverage area, only that base station will retain the management information.

31. Second, If Applicants mean that the management is kept on a "token" basis, such a limitation is not present in the claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the management is kept on a "token" basis) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations

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from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

32. Third, if applicants mean that the polling of the Home Location Register (HLR)/Visitor Location Register (VLR) within GSM/GPRS/UMTS architectures is bypassed, such limitations are not in the claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the polling of the Home Location Register (HLR)/Visitor Location Register (VLR) within GSM/GPRS/UMTS architectures is bypassed) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(a) 3rd Generation Partnership Project (3GPP), Technical Specification (TS) Group Radio Access Network; UTRAN Iur Interface General Aspects and Principles 3GPP TS 25.420, Version 3.3.0; 2001, pages 8-9, Section 4.4

(b) Ronneke (USP 7,359,360), Communication system supporting wireless communication of packet data and method and arrangement relating thereto.

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34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK A. MAIS whose telephone number is (571)272-3138. The examiner can normally be reached on M-Th 9am-8pm.

35. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

36. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 20, 2009

/Mark A. Mais/
Examiner, Group Art Unit 2419

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1/27/09